

111 Herrick Street, Merrimack, NH 03054 TEL: (603) 424-2022 • FAX: (603) 429-8496 www.amrolabs.com

July 30, 2010

ANALYTICAL TEST RESULTS

Raymond Siegener GEI Consultants, Inc. 400 Unicorn Park Drive Woburn, MA 01801

TEL: (781) 721-4098 FAX: (781) 721-4073

Subject: 09382-2 Canton Airport

Workorder No.: 1007078

Dear Raymond Siegener:

AMRO Environmental Laboratories Corp. received 1 sample on 7/23/2010 for the analyses presented in the following report.

AMRO is accredited in accordance with NELAC and certifies that these test results meet all the requirements of NELAC, where applicable, unless otherwise noted in the case narrative.

The enclosed Sample Receipt Checklist details the condition of your sample(s) upon receipt. Please be advised that any unused sample volume and sample extracts will be stored for a period of 60 days from sample receipt date (90 days for samples from New York). After this time, AMRO will properly dispose of the remaining sample(s). If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This report consists of a total of 11 pages. This letter is an integral part of your data report. All results in this project relate only to the sample(s) as received by the laboratory and documented in the Chain-of-Custody. This report shall not be reproduced except in full, without the written approval of the laboratory. If you have any questions regarding this project in the future, please refer to the Workorder Number above.

Sincerely,

Nancy Stewart Vice President

State Certifications:

NH (NELAC): 1001, MA: M-NH012, CT: PH-0758, NY: 11278 (NELAC), ME: NH012 and

1001.

Hard copy of the State Certification is available upon request.

Date: 30-Jul-10

CLIENT:

GEI Consultants, Inc.

Project:

09382-2 Canton Airport

Lab Order:

1007078

Date Received:

7/23/2010

Work Order Sample Summary

Lab Sample ID

Client Sample ID

Collection Date

Collection Time

1007078-01A

093822-LOC33-Shingles-2

7/22/2010

8:40 AM

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Jul
1
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Lab Order:	1007078						•
Client:	GEI Consultants, Inc.				CA EV	DA LE CK	
Project:	09382-2 Canton Airport	ort					
Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name		Analysis Date	
				Preparatory Test Name	Prep Date	Batch ID	TCLP Date
1007078-01A	093822-LOC33-Shingles-2 7/22/2010 8:40:00 AM	7/22/2010 8:40:00 AM	Solid	EPA 8082 PCBS IN SOIL/SOLIDS		7/29/2010	
				EPA 3540C SOPREP SOXHLET: PCBS	7/27/2010	20469	

Chain-of-Custody Record	Laboratory	Laboratory Job # (Lab use only)	1007078
	Project Information		
	Project Name: Canton Airport	Project Location: Canton, MA	Page Zof Z
Consultants	Project Number: 09382-2	Project Manager: Anne Leifer	
9	Send Report to: rsiegener@geiconsultants.com	Preservative	Sample Handling
Woburn, MA 01801 PH: 781.721.4000 FX: 781.721.4073	Send EDD to: labdata@geiconsultants.com	none none none none Analysis	Samples Field Filtered
MCP PRESUMPTIVE CERTAINTY REQUIRED	IIRED - YES NO		YES NO NA
If Yes, Are MCP Analytical Methods Required?	ired? YES NO NA	Jelxoz lei	Sampled Shipped With Ice
If Yes, Have You Met Minimum Field QC Requirements?	YES NO NA	U	YES NO
Lab Sample ID Number	Collectiv Date	PCBs by extraction Zinc Vanadiui	Sample Specific Remarks
093812-L0033-SHING1ES-Z	161ES-2 7/22/10 0840 SOLID 2 SSH	×	
			The second secon
			nd existence of each
MCP_Level Needed: GEI requires the mos whenever possible: /	MCP_Level Needed: GEI requires the most stringent Method 1 MCP standard be met for all analytes whenever possible: /	Turnaround Time Before su (Business days):	Before submitting rush turnaround samples, you must
ignature)	Date: Time. Received by: (signature) 7,523/10 1700 GF! Sample Fridge		notify the laboratory to confirm that the TAT can be achieved.
Relinguished by: (signature)	Date: Time: Regained by: (signature)	5-Day 3-Day 3-Day Additional Requirements/Comments/Remarks:	nts/Remarks:
inquished by: (stagature)	Time: Robeived by Squature)	MANUAL SOXLET EXTRACTION REQUIRED.	
N	40 d. 1 H. Vavo	DCR RATES APPLY.	
elinquished by: (s)	1890 1130 Received by (signature)		
y of the same			

SAMPLE RECEIPT CHECKLIST

111 Herrick Street Merrimack, NH 03054 (603) 424-2022

Client: OEI	AMRO I	D·	/00	000) 424-2022 \$7\$78
Project Name: Canton Airport	Date Rec			(23/10
Ship via: (circle one) Fed Ex., UPS, (MRO Courier)	Date Due		*****	30//0
Hand Del., Other Courier, Other:	2000 2000			30//0
			_	Abendrika
Items to be Checked Upon Receipt	Yes	No	NA	Comments
Army Samples received in individual plastic bags?	103	110	V	Confinents
2. Custody Seals present?			Ť	
3. Custody Seals Intact?			5	
4. Air Bill included in folder if received?				
5. Is COC included with samples?			<u> </u>	
			ļ	
6. Is COC signed and dated by client? 7. Laboratory receipt temperature. TEMP = 6°		<u> </u>	ļ	
Samples rec. with ice \checkmark ice packs neither				
8. Were samples received the same day they were sampled?		~	ļ	
Is client temperature = or <6°C?	✓			
If no obtain authorization from the client for the analyses.				
Client authorization from: Date: Obtained by:				
9. Is the COC filled out correctly and completely?	✓			
10. Does the info on the COC match the samples?	V			
11. Were samples rec, within holding time?	V			
12. Were all samples properly labeled?	✓			
13. Were all samples properly preserved?			1	
14. Were proper sample containers used?	\			
15. Were all samples received intact? (none broken or leaking)	✓ .			
16. Were VOA vials rec. with no air bubbles?			/	
17. Were the sample volumes sufficient for requested analysis?	\		1	
18. Were all samples received?	1			
19. VPH and VOA Soils only:				
Sampling Method VPH (circle one): M=Methanol, E=EnCore (air-tight container)		,		
Sampling Method VOA (circle one): M=Methanol, SB=Sodium Bisulfate, E=EnCor	e. B≕Bulk			
If M or SB:		- •	<u> </u>	
Does preservative cover the soil?	Appellant and as in the above a second	*		
If NO then client must be faxed.			<u> </u>	
Does preservation level come close to the fill line on the vial?				
If NO then client must be faxed.			 	
Were vials provided by AMRO?	·			
If NO then weights MUST be obtained	from elia	n t	<u></u>	
Was dry weight aliquot provided?	II OIII CHE	111	1	
If NO then fax client and inform the V	DA lab A	SAP	<u> </u>	
20. Subcontracted Samples:	JAN 100 A		T ,	
What samples sent:			 	
Where sent:				
Date:				
l · · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·
Analysis:			<u> </u>	
TAT:			<u> </u>	
21. Information entered into:			ļ	
Internal Tracking Log?	✓			
Dry Weight Log?			<u> </u>	
Client Log?			1	
Composite Log?			٠. مرب	
Filtration Log'?			7	
Received By: KW Date: 7/3-3/19 Logged in By: KW			Date: 7	7/26/10
Labeled By: Kw Date: 7/26/10 Checked By: W	9		Date:	7/27/W

Date: 30-Jul-10

CLIENT:

GEI Consultants, Inc.

Project:

09382-2 Canton Airport

Lab Order:

1007078

CASE NARRATIVE

PCBs:

1. No QC deviations were observed.

		Ma	ssDEP Analytic	al Protocol Certif	ication Form	
Labo	oratory Na	ame: AMRO Enviro	onmental Lab. Corp),	Project #: 0938	2-2
Proje	ect Locati	on: Canton	Airport		RTN:	
This	Form pro		ns for the following 7078 -01		boratory Sample ID Nu	mber(s):
Matri	ces: Gr	oundwater/Surface	e Water Soil/Se	diment Drinking	Water Air Other:	Shingle
CAM	Protoco	ol (check all that a	pply below):			0
8260 CAM		7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
8270 CAM	SVOC II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 CAM	Metals III A	6020 Metals CAM III D	8082 PCB CAM V A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B	
1	Affirmativ	/e Responses to (Questions A throu	ıgh F are required	for "Presumptive Certa	ainty" status
Α	Custody,		ed (including temp		scribed on the Chain-of- eld or laboratory, and	Yes No
В		e analytical methodi tocol(s) followed?	(s) and all associate	ed QC requirements :	specified in the selected	(Yes) No
С	Were all CAM pro	required corrective tocol(s) implemented	actions and analytic d for all identified per	cal response actions formance standard no	specified in the selected on-conformances?	(Yes) No
D		Assurance and Qu			specified in CAM VII A, sition and Reporting of	(Yes) No
E	a. VPH, modifical	tion(s)? (Refer to the	lethods only: Was individual method(s	each method condi) for a list of significan ete analyte list reporte		NA Yes No Yes No
F					-conformances identified Questions A through E)?	(Yes) No
Res	ponses	to Questions G, F	l and I below are i	required for "Presu	ımptive Certainty" stat	us
G	Were the protocol(r below all CAM repo	orting limits specified in	the selected CAM	(Yes) No ¹
				inty" status may not ne R 40, 1056 (2)(k) and W	ecessarily meet the data us SC-07-350.	ability and
Н	Were all	QC performance sta	andards specified in t	he CAM protocol(s) a	chieved?	(es) No¹
ı	Were res	sults reported for the	complete analyte list	t specified in the selec	ted CAM protocol(s)?	(Yes) No
¹ All i	negative re	esponses must be a	addressed in an atta	ched laboratory narr	ative.	
respoi	nsible for e	ned, attest under the obtaining the informate and complete.	e pains and penaltie ation, the material co	es of perjury that, ba ntained in this analytic	sed upon my personal in al report is, to the best of	quiry of those my knowledge
Sign	ature\	la So		Positio	on: Vice President	
Print	ted Name	e: Nancy Stewart		7 Date:	8-4-10	

DATA COMMENT PAGE

Organic Data Qualifiers

- ND Indicates compound was analyzed for, but not detected at or above the reporting limit.
- Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
- H Method prescribed holding time exceeded.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- B This flag is used when the analyte is found in the associated blank as well as in the sample.
- R RPD outside accepted recovery limits
- RL Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
- S Spike Recovery outside accepted recovery limits.
- # See Case Narrative

Micro Data Qualifiers

TNTC Too numerous to count

Inorganic Data Qualifiers

- ND or U Indicates element was analyzed for, but not detected at or above the reporting limit.
- J Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
- H Indicates analytical holding time exceedance.
- B Indicates that the analyte is found in the associated blank, as well as in the sample.
- MSA Indicates value determined by the Method of Standard Addition
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- R RPD outside accepted recovery limits
- RL Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
- S Spike Recovery outside accepted recovery limits.
- W Post-digestion spike for Furnace AA analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.
- * Duplicate analysis not within control limits.
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
- # See Case Narrative

Report Comments:

- 1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
- 2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

Date: 30-Jul-10

CLIENT:

GEI Consultants, Inc.

Client Sample ID: 093822-LOC33-Shingles-2

Lab Order:

1007078

Collection Date: 7/22/2010 8:40:00 AM

Project:

09382-2 Canton Airport

Matrix: SOLID

Lab ID:

1007078-01A

Analyses	Result	RL Q	ial Units	DF	Date Analyzed
PCBS BY EPA8082	S	W8082			Analyst: KA
Aroclor 1016	ND	450	μg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1221	ND	450	μg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1232	ND	450	μg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1242	МD	450	µg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1248	ND	450	µg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1254	ND	450	µg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1260	ND	450	µg/Kg	1	7/29/2010 3:30:00 PM
Aroclor 1262	ND	450	µg/Kg	- 1	7/29/2010 3:30:00 PM
Aroclor 1268	ND	450	μg/Kg	1	7/29/2010 3:30:00 PM
Surr: Tetrachloro-m-xylene	101	30-150	%REC	1	7/29/2010 3:30:00 PM
Surr: Decachlorobiphenyl	100	30-150	%REC	1	7/29/2010 3:30:00 PM

AMRO Environmental Laboratories Corp.

Project: 09382	09382-2 Canton Airport									Method Blank	Blank
Sample ID: MB-20469 Client ID:	Batch ID: 20469	Test Code Run ID:	Test Code: SW8082 Run ID: GC-ELVIS	SW8082 Units: µg/Kg GC-ELVIS_100728A	/Kg		Analysis D SeqNo:	ate: 7/28/201 749464	Analysis Date: 7/28/2010 12:08:00 PM SeqNo: 749464	Prep Date: 7/27/2010	0
Analyte	QC Sample Result	RL	Units	QC Spike Original Sample Amount Result	nal Sample Result	Sample Result %REC	LowLimit	C HighLimit	Original Sample or MS Result	%RPD RPDLimit	if Que
Aroclor 1016	Q	20	µg/Kg								
Aroclor 1221	QN	50	µg/Kg								
Aroclor 1232	Q	50	µg/Kg								
Aroclor 1242	Q	50	µg/Kg								
Aroclor 1248	Q	20	µg/Kg								
Aroclor 1254	Q	50	µg/Kg								
Aroclor 1250	ON	20	µg/Kg								
Aroclor 1262	Q	50	µg/Kg								
Aroclor 1268	ON	50	µg/Kg								
Surr: Tetrachloro-m-xylene	16.41	0	µg/Kg	16	0	103	30	150	0		
Surr: Decachlorobiphenyl	17.29	0	µg/Kg	16	0	108	30	150	0		

NA - Not applicable where J values or ND results occur B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate. J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

10

AMRO Environmental Laboratories Corp.

CLIENT: GEI Con Work Order: 1007078 Project: 09382-2	GEI Consultants, Inc. 1007078 09382-2 Canton Airport								QC SUMMARY REPORT Laboratory Control Spike	MARY	JMMARY REPORT Laboratory Control Spike	Z
Sample ID: LCS-20469 Client ID:	Batch ID: 20469	Test Coc Run ID:	de: SW8082 Units GC-ELVIS_100728A	Units: µg/Kg100728A	J/Kg		Analysis D SeqNo:	ate: 7/28/201 749467	Analysis Date: 7/28/2010 1:27:00 PM SeqNo: 748467	Prep Date	Prep Date: 7/27/2010	
Analyte	QC Sample Result	돲	Units	QC Spike Original Sample Amount Result		%REC	LowLimit	C HighLimit	Original Sample or MS Result	%RPD	RPDLimit	On
Aroclor 1016 Aroclor 1260 Surr: Tetrachloro-m-xylene Surr: Decachlorobiphenyl	1013 1093 ne 17.46	50 50 0	µg/Kg µg/Kg µg/Kg µg/Kg	1000 1000 16	0000	101 109 109	70.9 60.1 30	125 126 150 150	000			
Sample ID: LCSD-20469 Client ID:	Batch ID: 20469	Test Cod Run ID;	Test Code: SW8082 Units	Units: µg/Kg _100728A	/Kg		Analysís D. SeqNo:	ate: 7/28/201 749468	Analysis Date: 7/28/2010 1:54:00 PM SeqNo: 749468	Prep Date	Prep Date: 7/27/2010	
Analyte	QC Sample Result	R	Units	QC Spike Original Sample Amount Result		%REC	LowLimit	C HighLimit	Original Sample or MS Resuit	%RPD	RPDLimit	ő
Aroclor 1016 Aroclor 1260	906.6	90	µg/Кg µg/Кg	1000	00	90.7	70.9	125	1013	11.1	50	
Surr: Tetrachloro-m-xylene Surr: Decachlorobiphenyl	14.54 1 17.59	00	µg/Kg µg/Kg	6 6	00	90.9	9 9	150	0 0	0 0	00	

NA - Not applicable where J values or ND results occur B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits RL - Reporting Limit, defined as the lowest concentration the laboratory can accurately quantitate. J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers: